

## CLAIMS

1. A mobile LAN (201) for a first number of hosts (2021, 2022, 2023, 2024) intended to communicate with a second number of hosts (219) connected to an external network (218), comprising:

means (203) for connecting said first number of hosts to the LAN, the hosts in the first number of hosts receiving packet data from and transmitting packet data to other hosts in the first number of hosts,

routing means (204) connected to or included in the LAN (201), and

a mobile station (205) connected to the routing means (204);

at least one host (2024) in the first number of hosts capable of receiving packet data from and transmitting packet data to at least one host (219), connected to an external network (218), via said routing means (204) and said mobile station (205)

said external network (218) utilising unique globally defined addresses characterised in

that a set of locally defined addresses are utilised internally in the LAN

that storing means (206) is connected to the routing means (204) for storing a number of unique globally defined addresses of the kind utilised in the external network

that means (207) is connected to the routing means (204) for temporary translation of an internal address of the kind used internally in the LAN (201) into a global address of the kind used in the external network (218).

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2. A mobile LAN as claimed in claim 1 characterised in that said temporary translation for data packets moving into the mobile LAN via the routing means, consists in changing a destination address field of the data packet from said globally defined address into said locally defined address and accordingly adjusting any control field in the data packet.
3. A mobile LAN as claimed in claim 1 or 2 characterised in that said temporary translation, for data packets moving away from the mobile LAN via the routing means, consists in changing a source address field of the data packet from said locally defined address into said globally defined address and accordingly adjusting any control field in the data packet.
4. A mobile LAN as claimed in any of the preceding claims characterised in that said routing means (204), said storing means (206) and said means for temporary translation (207) are integrated in said mobile station (205).
5. A mobile LAN as claimed in any of the preceding claims characterised in that the number of globally defined addresses stored in said storing means is one.
6. A method for establishing a packet data communication between a first host among a first number of interconnected hosts and a second host in an external local or wide area network utilising globally defined addresses, said packet data being routed and radio

transmitted and sent over said external network,  
characterised in the following steps:

- 5  
a) utilising a set of locally and internally defined  
addresses for the packet data to be communicated by  
said first host,
- 10  
b) storing a number of globally defined addresses of  
the kind utilised in the external network, and
- c) temporarily translating the locally defined address  
used by the first host into one of the globally  
defined addresses stored according to step b).

- 15 7. A method for establishing a packet data communication  
between a first host, attached to a mobile LAN, and a  
second host, connected to an external local or wide  
area network (LAN/WAN), said mobile LAN comprising  
means for connecting said first host to the mobile  
20 LAN, routing means connected to or included in the  
mobile LAN, and a mobile station connected to the  
routing means; said external network utilising  
globally defined addresses characterised in  
the following steps:
- 25  
utilising a set of locally defined addresses  
internally in the LAN
- 30  
storing a number of global addresses of the kind  
utilised in the external network in storing means  
connected to the routing means
- 35  
temporarily translating, in translating means  
connected to the routing means, the locally defined  
address used by the first host into one of the

globally defined addresses stored in the storing means.

8. A method as claimed in claim 7

5 characterised in that said translating terminates when said first host has not received nor transmitted any packet via the routing means for a predetermined time.

10 9. A method according to any of claim 7 or 8 characterised in

that said translating, for packets moving into the mobile LAN via the routing means, consists in

15 changing a destination address field of the packet from said globally defined address into said locally defined address and accordingly adjusting any control field in the packet.

20 10. A method according to any of claim 7 to 9 characterised in

25 that said translating, for packets moving away from the mobile LAN via the routing means, consists in

30 changing a source address field of the packet from said locally defined address into said globally defined address and accordingly adjusting any control field in the packet.

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at 7*